

# Using qsh.pl to Check Memory Usage

You can use the qsh.pl tool to check the memory usage of jobs running on Pleiades, Aitken, or Electra. This tool is a Perl script that uses Secure Shell (SSH) protocol to access all of the nodes used by a PBS job in order to run a command that you supply.

For Pleiades, Aitken, and Electra jobs, you can run qsh.pl on the PFEs.

The qsh.pl tool is available in the /u/scicon/tools/bin directory.

TIP: Add the directory to your shell startup script so that you can invoke qsh.pl without typing the full path each time. For example:

```
set path = ( $path /u/scicon/tools/bin )
```

## Syntax:

```
pfe21% qsh.pl job_id command
```

You can use this script to check the amount of free memory in the nodes of your PBS job.

## Example:

```
pfe21% qsh.pl 30329 "cat /proc/meminfo"
```

```
running "cat /proc/meminfo" on: r56i2n14 r56i2n15
r56i2n14 :
  MemTotal:      8079728 kB
  MemFree:       857936 kB
  Buffers:        0 kB
  Cached:       3775472 kB
...
r56i2n15 :
  MemTotal:      8079728 kB
  MemFree:       5840920 kB
  Buffers:        0 kB
  Cached:       784280 kB
...
```

*The qsh.pl script was provided by NAS staff member Bob Hood.*

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